

Abstract

Energy consumption meter arrangement

5 An energy consumption meter arrangement is specified which has two inputs (1, 2), to which signals are fed which are dependent on an electrical voltage (V) and an electrical current (I). These signals are digitized in analog-to-digital converters (3, 4) and combined with one another. In
10 order to correct phase differences which may be caused by means for coupling-in the signals (12, 14), a phase evaluation block (9) is coupled to the inputs (1, 2) of the energy consumption meter arrangement. The phase evaluation block (9) drives a phase correction block (6) at the output
15 of an analog-to-digital converter (4). As a result, cost-effective compensation of phase errors is possible with little complexity, which makes DC isolation possible at the input whilst avoiding measurement errors. The described
20 energy consumption meter arrangement is particularly suitable for implementation using integrated circuit technology.

Figure